REMARKS

This application has been carefully reviewed in light of the Office Action dated January 5, 2005. Applicant has amended claim 11. Reconsideration and favorable action in this case are respectfully requested.

Applicants note with appreciation that the Examiner has allowed claims 8-11 and has indicated that claims 2-6 and 12-16 are allowable if rewritten in independent form.

Applicant has updated information on related applications as requested by the Examiner.

Applicant has made a minor grammatical correction in claim 11.

The Examiner has rejected claims 1 and 7 under 35 U.S.C. §102(b) as being unpatentable over U.S. Pat. No. 5,379,434 to DiBrino. Applicants have reviewed this reference in detail and do not believe that it discloses or makes obvious the invention as claimed.

The Examiner has rejected claims 1-2 and 6-7 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over U.S. Pat. No. 6,684,280 to Chauvel et al, in view of U.S. Pat. No. 5,379,434 to DiBrino. Applicants have reviewed these references in detail and do not believe that they disclose or make obvious the invention as claimed.

Claims 1 and 7 remain rejected by the Examiner. Claim 1 of the present application reads as follows:

> 1. (Original) A method for prioritizing access to a shared resource in a digital system having a plurality of devices vying for access to the shared resource, comprising the steps of:
>
> initiating an access request by each of the plurality of devices;

providing two priority values along with each access request from each device; and

arbitrating for access to the shared device by using the higher of the two priority values from each device.

Claim 7 of the present application reads as follows:

7. (Original) A digital system comprising:

a shared resource;

a plurality of devices connected to access the shared resource, wherein each device has a request output and circuitry for providing two separate variable priority values;

arbitration circuitry connected to receive a request signal from the request output of each device along with the two priority values from each device, wherein the arbitration circuitry is operable to schedule access to the shared resource according to the higher of the two priority values from each device.

As the Examiner states in the Office Action, U.S. Pat. No. 6,684,280 "fails to disclose the step of: initiating an access request by each of the plurality of device; providing two priority values along with each access request from each device; and arbitrating for access to the shared device by using the higher of priority value from each device."

An inspection of claim 1 shows that the step which U.S. Pat. No. 6,684,280 "fails to disclose" is, in fact, *all three elements* of claim 1 and *two of the three* elements of claim 7. The only similarities between the claims of the '280 patent and the present application is in the preambles of the claims. Applicants do not believe that the judicially created doctrine of obviousness type double patenting was made to apply to two very distinct inventions merely because the preambles are similar.

Further, the DiBrino reference does not provide any of the elements of the claims. DiBrino is not directed towards arbitrating between multiple access requests. Instead,

DiBrino is directed towards a multiprocessor system, where one of the multiple processors is designated to service an I/O request before the interrupt associated with the I/O request occurs (col. 4, lines 19-23). The processo of designating a processor to service an I/O request is performed in two phases. In a first "competition" phase, priority data in each processor's interrupt priority register is compared to find the processor with the lowest priority (col. 4, lines 24-30). In a second "identification" phase, if there is a tie for lowest priority, a single processor is selected by reference to unique identification information for each processor, where the highest identification number is selected (col. 4, line 67 through col. 5, line 8).

In DiBrino, the process of selecting a processor to service an I/O interrupt is performed continuously so that when a I/O request is received the servicing processor has already been designated (col. 4, lines 19-23).

First, DiBrino does not show the step of "initiating an access request by each of the plurality of devices". DiBrino describes a method of determining *which processor will service an interrupt*; it does not determine *which I/O request will be handled first in the event of multiple concurrent requests*.

Second, DiBrino does not show "providing two priority values along with each access request from each device"; in fact, it does not show any priority values along with an access request, since DiBrino does not arbitrate between access requests.

Third, DiBrino does not show the step of "arbitrating for access to the shared device by using the higher of the two priority values from each device". Even in the two phase selection of the designated processor for servicing interrupts, the competition phase looks only at the processor priority value of each processor (without regard to the processor identification value) and the identification phase looks only at the processor identification value (without regard to the processor priority value). Accordingly, it can not arbitrate by using *the higher of the two priority values* from each device.

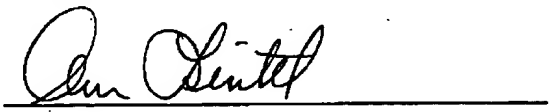
Accordingly, Applicant respectfully requests allowance of claims 1 and 7.

The Commissioner is hereby authorized to charge any fees or credit any overpayment, including extension fees, to Deposit Account No. 20-0668 of Texas Instruments Incorporated.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Alan W. Lintel, Applicants' Attorney at (972) 664-9595 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



Alan W. Lintel
Attorney for Applicant(s)
Reg. No. 32478

March 30, 2005
Anderson, Levine & Lintel
14785 Preston Rd.
Suite 650
Dallas, Texas 75254
Tel. (972) 664-9595